

January 18, 2019

California Water Plan Update 2018
Strategic Water Planning Branch
Statewide Integrated Water Management
California Department of Water Resources
P.O. Box 942836
Sacramento, CA 94236-001

By e-mail:

cwpc@water.ca.gov

Attn: Francisco Guzman

re: 2018 Draft Water Plan Update
Opportunity for Public Comment

Dear Sirs:

Poseidon Water LLC (“Poseidon”) appreciates the opportunity to provide this brief letter of comment on the Department of Water Resources’ Draft Water Plan Update (“Draft Update”). Poseidon, an indirect subsidiary of Brookfield Infrastructure Partners LP, is a developer of large, complex water infrastructure water projects based on the model of public-private partnership. In California, Poseidon led the development of the Claude “Bud” Lewis Carlsbad Desalination Plant, which entered service in December 2015 and supplies San Diego County Water Authority with a high-quality, droughtproof source that meets roughly nine percent of the County’s public drinking water needs. Poseidon is also the lead developer of the proposed Huntington Beach Desalination Plant, which would meet a comparable volume of drinking water needs for Orange County. Poseidon takes a strong interest in statewide water policies in California bearing on the provision of public water supply, especially in the relatively arid, densely-populated Southern California region.

Part 1: General Comments

A clear theme of the Draft Update is the ever-increasing complexity of the water management challenge in California. Another central theme is the need to adapt the operation of the complex network put in place in the World War II era, in response to fundamental changes in hydrological conditions and population patterns over time. The document describes a broad range of goals – some complementary, but others competing or even in direct conflict – that must be

met by today's water planners. These goals, as described in the document's "Featured Companion State Plans" section, include the following:

- meet human needs for safe, adequate, high-quality public water supply
- support a thriving economy
- protect public health and safety
- protect the interests of disadvantaged communities
- provide flood protection
- support fire protection
- arrest and reverse ecosystem decline
- protect forests, fish and wildlife
- ensure healthy soils
- safeguard groundwater supplies and guard against subsidence

The Plan Update contemplates a decades-long planning horizon during which California is all but certain to experience large-scale population growth, intensifying effects of climate change, and continuing pressure on the public funding sources that have traditionally been used to supply the needed capital to meet these challenges.

From this brief summary and analysis, certain conclusions are clear. First and foremost, sound water planning over this period will require difficult tradeoffs. Some degree of conflict is inevitable, but proper management and minimization of this conflict requires that no single objective can be given overriding priority to the exclusion of others. The need to strike a careful balance among a broad range of legitimate objectives must be communicated to, and shared by, all relevant state governing bodies.

Finally, the 2018 Plan Update describes several new initiatives aimed at improving environmental protection and remedying problems caused by past patterns of operation of California's legacy water network. These include recent commitments to reduce urban water supply diversions, to protect and promote restoration of threatened and endangered fish populations; the September 2018 California Biodiversity Initiative, focused on management improvements and ecosystem restoration; and implementation of groundwater protection rules pursuant to the Sustainable Groundwater Management Act of 2014. These initiatives are critically necessary to meet the full suite of planning objectives, but it is important to recognize that their cumulative effect will be to put even more pressure on the goal of meeting public water supply needs.

Part 2: Recommendations

Given these conclusions, and recognizing that the purpose of the Plan is not to prescribe specific solutions or investments, Poseidon recommends that the Draft Update be modified to put increased emphasis on the following three general principles, specifically as they relate to furnishing public water supply.

1. Increase reliance on local resources. The planning framework should encourage local water agencies to pursue all available local public water supply options. As the Draft Update describes, California's core water supply network is based on large-volume, long-distance water transfers, generally in a north-to-south and east-to-west direction. This legacy system will remain indispensable. Nevertheless, it is essential to ease strain on the system and reduce the risk of undue reliance on this approach in an era of intensifying climate change, more erratic precipitation, reduced snowpack and aging infrastructure subject to decay, subsidence and seismic risk. Diversification strategies to increase local self-reliance can take many forms including conservation, recycling, stormwater capture, and direct as well as indirect potable reuse of wastewater. Seawater desalination, in particular, can provide a benefit for coastal communities located at great distance from abundant freshwater sources.
2. Focus on drought-resilient resources. Given the Draft Update's strong emphasis on the prospect of climate change, the Plan should emphasize the need for local agencies to prepare for conditions featuring longer, hotter and more intense periods of drought. This preparation can take many forms, e.g., conservation and efficiency, surface storage, reuse and desalination. Although expanded surface storage and stormwater capture can support many of the Plan's objectives, they will be of limited value during extremely protracted droughts that are projected to occur more frequently. Likewise, direct and indirect potable reuse of wastewater represents a very promising opportunity that Poseidon is actively pursuing in several states; however, base quantities of wastewater for environmental flows must be preserved. From our experience we have learned that, as more communities begin to pursue reuse projects, wastewater itself gains recognition in its own right as a valuable resource that is subject to supply limitations. Seawater desalination can offer exceptional strategic and insurance value when sited in drought-prone areas because this supply is resilient to the highly variable hydrology that many expect to be the new norm for California.

3. Encourage use of alternative financing. The Draft Update recognizes that the capital investment required to maintain, rehabilitate and expand the state's water infrastructure systems to meet all of these objectives will far surpass the capacity of traditional funding sources, such as the state and local general funds and revenue bonding capacity. Meeting these needs adequately will require an "all-of-the-above" approach that makes much greater use of private sources of capital. Many other forms of public infrastructure have been developed using private capital under a variety of regulatory frameworks (e.g., electricity, natural gas, telecommunications, railways). Poseidon's Carlsbad experience illustrates the potential for using the model of public-private partnership to meet public water infrastructure needs using private financing sources, while ensuring transparency and accountability.

Thank you for opportunity to share Poseidon's perspective. Please contact me directly should you have questions concerning our comments and recommendations.

Sincerely,

A handwritten signature in black ink, appearing to read 'Carlos Riva', followed by a horizontal line.

Carlos Riva
President and CEO